

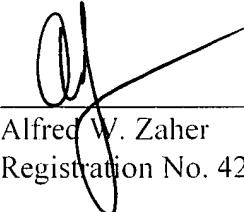
PATENT
ATTORNEY DOCKET: 14728.00002

REMARKS

Please amend claims 5, 6, 11 and 12 as indicated above. The amendments were made to reduce the number of multiple dependent claims. No new matter has been introduced by this amendment. A courtesy copy of the International Application was filed along with the above-identified application on June 1, 2001.

Respectfully submitted,

By:


Alfred W. Zaher
Registration No. 42,248

Saul Ewing LLP
Centre Square West
1500 Market Street, 38th Floor
Philadelphia, PA 19102
Telephone: 215-972-8385
Fax: 215-972-2291
Email: azaher@saul.com

MARKED UP VERSION OF AMENDED CLAIMSCLAIMS:

1. An unspun yarn comprising a longitudinal main rope body, formed from at least one fibre assembly of substantially untwisted and parallel fibres, and at least one reinforcing thread helically wound around said main rope body and extending therealong in a single longitudinal direction, wherein at predetermined intervals the direction in which the reinforcing thread is wound around said main rope body is reversed.
2. An unspun yarn according to claim 1, wherein at least one second reinforcing thread is provided and helically wound around the main rope body.
3. An unspun yarn according to claim 1 or claim 2, wherein the main rope body further includes a longitudinal reinforcing core thread.
4. An unspun yarn according to claim 3, wherein the reinforcing core thread is crimped to permit longitudinal stretch thereof.
5. An unspun yarn according to any preceding claim 1, wherein the fibres of the fibre assembly are wool rovings or slubbings.
6. An unspun yarn according to any of claims 1 to 4 1, wherein a combination of different fibres are used in the fibre assembly.
7. A method of forming an unspun yarn comprising the steps of providing at least one continuous or substantially continuous fibre assembly of substantially untwisted and parallel fibres, providing at least one continuous or substantially continuous source of a reinforcing thread, forming the or each said fibre assembly into a longitudinal main

rope body; intermittently imparting opposing twists to alternate sections of the main rope body whilst drawing a first reinforcing thread longitudinally into surface contact with a twisted section of the main rope body, allowing the twisted section of the main rope body to engage the adjacent section of the first reinforcing thread, releasing the opposing twists in the twisted section of the rope body causing the engaged first reinforcing thread to wrap around the section of the main rope body.

8. A method according to claim 7, wherein a second reinforcing thread is separately drawn into engagement with an alternately twisted section of the combined main rope body and first reinforcing thread.
9. A method according to claim 7 or claim 8, further including the feeding together of two or more fibre assemblies to form said main rope body.
10. A method according to claim 9, wherein the fibre assemblies have differing characteristics.
11. A method according to any of claims 7 to 8, claim 7 wherein a core reinforcing thread is introduced into the main rope body.
12. An apparatus for producing an unspun yarn comprising a first supply source for a longitudinal main rope body formed from at least one fibre assembly of substantially untwisted and parallel fibres, at least one partial twist means through which the main rope body is to be passed from the first supply source via a first guide means in juxtaposition with said twist means, drive means for operating said twist means to cause intermittent reverse operation to impart a twist in one direction to longitudinal first sections of said main rope body alternating with a twist in the opposite direction of longitudinal second sections of said main rope body intermediate said the first

sections, second guide means positioned beside said twist means arranged to locate and guide a reinforcing thread from a second supply source into helical wrapping engagement longitudinally about said main rope body as the main rope body passes through the partial twist means and drawing means for drawing said main rope body and reinforcing thread through said partial twist means.

13. An apparatus according to claim 12 provided with a plurality of successive partial twist means and a means for introducing a separate reinforcing thread to the main rope body before it is drawn into each successive twist means.
14. An apparatus according to claim 12 or claim 13 wherein the or each partial twist means comprises a first input endless loop belt and a second output endless loop belt both located in spaced parallel relationship for intermittent reversible movement, said loop belts being arranged to grip and twist the main rope body as it passes transversely between the opposing runs of both the belts.